DOCUMENT RESUME

ED 356 332 CE 063 398

AUTHOR	Dyrenfurth, Michael J.
TITLE	Legal Responsibilities and Their Implications for Vocational Instructors. Module.
INSTITUTION	Quality Training Specialists, Inc., Climax Springs, MO.
SPONS AGENCY	Missouri State Dept. of Elementary and Secondary Education, Jefferson City. Div. of Vocational and Adult Education.
PUB DATE	[91]
NOTE	47p.; For related modules, see CE 063 399-407.
PUB TYPE	Guides - Classroom Use - Teaching Guides (For Teacher) (052)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Behavioral Objectives; *Competency Based Teacher Education; Course Content; Higher Education; Instructional Materials; Learning Activities; Learning Modules; Legal Problems; *Legal Responsibility; Postsecondary Education; *Program Development; Safety Education; *School Law; *School Safety; Secondary Education; Teacher Education Curriculum; Vocational Education; *Vocational Education Teachers

ABSTRACT

This module on legal responsibilities and their implications for vocational instructors is 1 in a series of 10 modules written for vocational education teacher education programs. It is specifically designed to introduce selected aspects of legal and professional requirements to the new or experienced teacher and to develop/augment competence in three areas: legal matters, liability, and safety. Introductory materials include the following: a listing of competencies/tasks to be covered, objective, overview of the module, listing of suggested resources, and content/instructional strategies, including prerequisite information. The module consists of three major subsections. Each subsection, referred to as learning experience, addresses selected competencies from the listed competencies/tasks. Additionally, each learning experience contains several different activities. The learning experiences are as follows: (1) familiarization with legal requirements associated with vocational education; (2) examining issues and practices associated with liability and its minimization; and (3) identifying, accessing, and planning a comprehensive safety program meeting state and local requirements. A learning experience may consist of some or all of these components: list of competencies/tasks, introduction, information/activity sheet(s), supplemental reading, and worksheet(s). A summary and review concludes the module. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

M091CD04

ED356332

MODULE:

Legal Responsibilities and Their Implications For Vocational Instructors

Written by:
Michael J. Dyrenfurth, PH.D.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

Quality Training Specialists
Box 96
Climax Springs, MO 65324
(314)345-4444

CE063398

BEST COPY AVAILABLE

Notes

MODULE: LEGAL RESPONSIBILITIES AND THEIR IMPLICATIONS FOR VOCATIONAL INSTRUCTORS

Legal matters invariably intrude into educational practice even if one ignores them. Teaching is a profession and that brings with it a number of exceptionally important responsibilities—for students, their instruction, their safety, for the instructional plant and its equipment and for appropriate behavior by the teacher.

As a new or experienced teacher, a professional, you are expected to be aware of the legal requirements as well as the responsibilities mandated by your school administration, professional standards and ethical concerns.

This module is specifically designed to introduce selected aspects of legal and professional requirements to you and to develop/augment your competence in three areas:

- Legal matters
- Liability
- Safety

Competencies/Tasks:

Recognize the link between curriculum documentation and legal responsibility.

Explain the meaning and implications of "in loco parentis".

Specify the key laws and regulations pertaining to their legal responsibilities.

Describe the legal implications of certifying students' competence.

Describe the essential components of a plan to reduce a vocational educator's liability exposure.

Identify the most appropriate manner to secure liability insurance protection for one's personal situation.

Identify key unique legal and/or safety requirements associated with assigned subject and situation.

Systematically incorporate provisions for student safety in the course and/or cooperative experience.

Recognize and provide for the special legal and safety requirements associated with vocational student organizations.

Provide for legal and product liability.

Objective:

While preparing for a teaching career, or early in the practice of such, you will be able to describe the legal responsibilities of vocational instructors and discuss their implications for day-to-day situations.

Notes

Overview of Module:

The module consists of three major sub-sections. Each sub-section (referred to as ***Learning Experiences)*** addresses selected competencies from the Competencies/ Tasks which are listed above. Additionally, each of the ***Learning Experiences*** contains several different activities. The ***Learning Experiences*** are:

Learning Experience I: Familiarization with legal requirements associated with vocational education. (Competency/Tasks 1, 2 & 3)

Learning Experience II: Examining the issues and practices associated with liability and its minimization. (Competency/Tasks 4, 5 & 6)

Learning Experience III: Identify, access and plan a comprehensive safety program meeting state and local requirements. (Competency/Tasks 7, 8, 9, & 10)

Suggested Resources:

Overall

1. _____. 1991-92 Missouri State Plan for Vocational Education. Missouri Vocational Education (MOVE). Missouri Department of Elementary and Secondary Education, Division of Vocational and Adult Education, Jefferson City, MO.
2. _____. Handbook for Secondary Vocational Education Program Planning. (R 13.0301 IL6).
3. _____. (1987). Vocational-technical Program and Course Standards. (R 13.0301 LA93).

Learning experience I: Legal matters related to vocational education

4. Missouri pertaining to legal aspects of vocational education
5. Teachers' professional responsibilities

Learning experience II: Liability matters related to vocational education

6. Stern, S. & Gathercoal, F. (1988). Reducing vocational teacher liability. Ann Arbor, MI: Prakken.
7. Missouri specifics pertaining to liability and vocational education

Learning experience III: Providing for safety in vocational education

8. Module E-5: Provide for student safety
9. Module E-6: Provide for first aid needs of students
10. An accident prevention Handbook

Notes

11. OSHA Regulation samples
12. AVA Hazardous material kit.
13. MVRC Safety resources
14. Missouri Specifics: Safety Responsibilities
15. National Safety Council publications, various, get from their schools department
16. Missouri safety program recommendation

NOTE: all Modules from: Professional teacher education module series. Columbus, Ohio: Center on Education and Training for Employment, The Ohio State University; Athens, GA: American Association for Vocational Instructional Materials. [Individual modules are available for loan and/or purchase from The Instructional Materials Laboratory/Missouri Vocational Resource Center, Room 3, London Hall, Department of PAVTE, University of Missouri-Columbia, Columbia, MO 65211, 314: 882-2884.

Content/Instructional Strategies

Prerequisite Information: None

Notes

Learning Experience I

Legal matters related to vocational education

Learning Experience I Competencies/Tasks:

1. Recognize the link between curriculum documentation and legal responsibility.
2. Explain the meaning and implications of "in loco parentis".
3. Specify the key laws and regulations pertaining to their legal responsibilities.

Introduction:

Learning Experience I consists of several different activities. Each of these activities is designed to help the you explore some aspect of vocational education's legal environment. The experiences include:

1. Read Activity 1, Missouri specifics pertaining to the legal aspects of vocational education.
2. Optionally you may wish to read the following supplemental reference material:
   - Vocational special needs legal requirements
   - MSTA teachers' legal requirements
   - Child abuse statutes
   - MSBA teachers' legal requirements
   - DESE teachers' legal requirements
3. You may wish to meet with your administrator, instructor and/or peers to further discuss the information in the readings. Another source for interpretations and insight are the Missouri DESE, Division of Vocational and Adult Education State staff (the Director and Supervisors)
4. Complete Activity 2's worksheet "Laws and requirements important to vocational education"

Activity Sheet 1

Secure and review basic legal information
Missouri specifics pertaining to the
legal aspects of vocational education

abstracted from
Dyrenfurth, Michael J. & Linhardt, Richard E. Vocational Safety Guide
Columbia, MO: Instructional Materials Laboratory
University of Missouri-Columbia, 1981.

1. Knowing key laws

Each state presents a unique set of circumstances related to vocational education safety. This section highlights those aspects of Missouri's situation that are unique. As such, this section includes mention of: state codes that specifically pertain to vocational safety, the applicability of OSHA regulations to Missouri's schools, and this guide's relationship to the existing school safety guidelines.

OSHA and Missouri

Missouri does not have a federally approved state plan for safety and health. Therefore, Missouri public schools are not subject to any direct safety and health regulation under OSHA. However, teachers are liable under common law should an accident occur.

Missouri Eye Safety Law

Missouri has enacted a specific law governing eye protection (Missouri Revised Statutes, 1978. #170.005, 170.007, 170.009). The figure on the following page presents an overview of these requirements.

Child Labor Requirements

Missouri law does not presently treat cooperative education specifically. However, child labor age prohibitions may be waived, for selected occupations only, where the student-learner is enrolled in a course of study and training in a cooperative vocational training program under a recognized state of local educational authority or in a course of study in a substantially similar program conducted by a private school; and such student-learner is employed under a written agreement which provides: (1) that the work of the student-learner in the occupations declared particularly hazardous shall be incidental to his/her training; (2) that such work shall be intermittent and for short periods of time and under the direct and close supervision of a qualified and experienced person; (3) that safety instructions shall be given by the school and correlated by the employer with on-the-job training; and (4) that a schedule of organized and progressive work processes to be performed on the job shall have been prepared. Each such written agreement shall contain the name of the student-learner, and shall be signed by the employer and the school coordinator or principal. Copies of each agreement shall be kept on file by both the school and the employer. This exemption for the employment of student-learners may be revoked in any individual situation where it is found that reasonable precautions have not been observed for the safety of minors employed thereunder. It should also be noted that many employers and insurance companies set safety standards above those specified in Child Labor Requirements in Nonagricultural Occupations (40).

Good Samaritan Law

Missouri has adopted a law that protects professionals who practice their profession in good faith. It, however, does not directly (in writing) state that it applies to teachers providing emergency or first aid services.

STATE LAW REQUIRES EYE PROTECTION

In accordance with Sections 170.005, 170.002 and 170.009 RSMo :

170.003. Eye Protection—who affected. — Every student, teacher and visitor is required to wear an industrial quality eye protective device when participating in or observing any of the following courses in schools, colleges, universities or other educational institutions:

(1) Vocational, technical, industrial arts, chemical, or chemical-physical shops or laboratories involving exposure to the following: hot molten metals, or other molten materials; milling, sawing, turning, shaping, cutting, grinding or stamping of any solid materials; heat treatment, tempering, or kiln firing of any metal or other materials; gas or electric arc welding, or other forms of welding processes; repair or servicing of any vehicle; caustic or explosive materials;

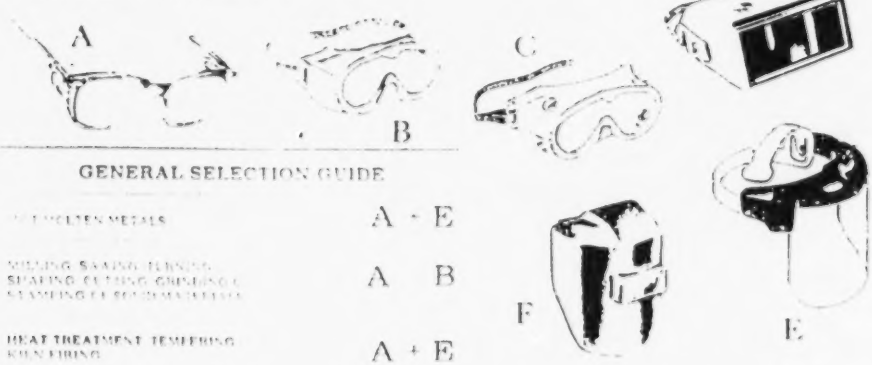
(2) Chemical, physical, or combined chemical-physical laboratories involving caustic or explosive materials, hot liquids or solids, injurious radiations or other hazards not enumerated. *(SB 519, 78th General Assembly, Second Regular Session)*

170.007. Standards for Protective Devices. — As used in this act, "Industrial Quality Eye Protective Devices" means devices meeting the standards of the American National Standard Practice for Occupational and Educational Eye and Face Protection, Z87.1—1968, and subsequent revisions thereof, approved by the American National Standards Institute, Inc. *(SB 519, 78th General Assembly, Second Regular Session)*

170.009. Implementation of Eye Protection Act. — The state board of education and the coordinating board for higher education shall prepare and circulate to each public and private educational institution in this state instructions and recommendations for implementing the eye safety provisions of this act. *(SB 519, 78th General Assembly, Second Regular Session)*

SUGGESTED COMMON EYE PROTECTORS

Devices must comply with the above standards



GENERAL SELECTION GUIDE

HOT MOLTEN METALS	A + E
MILLING, SAWING, TURNING, SHAPING, CUTTING, GRINDING, STAMPING OF SOLID MATERIALS	A B
HEAT TREATMENT, TEMPERING, KILN FIRING	A + E
GAS WELDING	D
ARC WELDING	F
VEHICLE REPAIR AND SERVICE	A OR B
CAUSTIC OR EXPLOSIVE MATERIALS; CHEMICAL SPLASH OR DUST	C OR A + E

All eye protection equipment must meet standards of the American National Standard Institute (ANSI) Practice for Occupational and Educational Eye and Face Protection, Code Z87.1-1968 or later revisions of this Code. Most prescription glasses do not meet the standards necessary for the protection of the individuals as prescribed in the law.

Publication of Department of Elementary and Secondary Education

BEST COPY AVAILABLE

Teachers' Professional Responsibilities

Adapted from
Dyrenfurth, Michael J. et al. (1987). Missouri Industrial Technology Education Guide
Columbia, MO: Instructional Materials Laboratory
University of Missouri-Columbia

1. Addressing Professional Responsibilities

Responsibilities

Industrial Educators (teachers and supervisors) have many overlapping areas of responsibility. The primary responsibilities are to serve youth, to be effective and to participate in the profession. Within these three primary charges lies the core of the teacher's responsibility and profession. Specifically, IE instructors are expected to:

- Manage the IE facility
- Prepare budgets and assist in the purchasing process
- Supervise student laboratory activities
- Concern themselves with student value systems
- Move students along at a pace commensurate with their talent
- Develop and/or select appropriate instructional materials
- Provide a safe facility and instruct to insure safe operation within it
- Control disbursement of consumable supplies
- Maintain appropriate discipline
- Evaluate the IE program's effectiveness
- Develop courses of study
- Assess and further the efficiency and effectiveness of their instruction
- Establish and secure approval for IE policies
- Impart knowledge, attitudes and skills consistent with the acknowledged goals of IE
- Familiarize themselves with the characteristics of their students
- Attend to the demands of individual differences and special needs
- Systematically assess, record and communicate student progress
- Keep current in their technological field
- Reward performance and motivate students towards it
- Follow school policy

The literature is full of such long lists of duties that detail each of the major responsibilities. More important than memorizing these lists is that industrial educators internalize them. In other words, that they become an integral part of one's being. Some representative behaviors that would exemplify such internalization include:

- **Annually participating in MVA and related state conferences.**
- **Attending AVA national conferences at least periodically (every 2-5 years)**
- **Actively looking for, and participating in, in-service opportunities each year.**
- **Evaluating one's performance systematically and on an ongoing basis.**
- **Developing and implementing personal and local IE program improvement plans.**
- **Sponsoring student organizations such as VICA, TSA, etc..**
- **Effective management of the IE facility, equipment and supplies.**
- **Systematic documentation of the IE curriculum.**
- **Maintaining a high degree of accuracy in grading and performance records.**
- **Emphasizing safety throughout the IE program.**
- **Attending to public relations for the IE program and school.**

- **Developing a long-range budget.**
- **Participating in extra-curricular activities.**
- **Using individualized instruction as appropriate.**
- **Maintaining effective discipline.**
- **Helping other teachers and participants in school and program activities.**

2. Securing Preservice Preparation and Teacher Certification

As a minimum, IE teachers need to possess a valid high school graduation or equivalent as well as certification from the MODESE Possession of appropriate numbers of successful work experience is usually the basis for which IE certification is granted. Emergency and/or provisional and/or temporary certificates are not considered appropriate by the profession.

In order to be properly hired as an IE teacher, individuals must have completed at least the minimum pre-service preparation required for state certification. In Missouri, as in most states, the certification process is actually a licensure activity. Individuals complete required courses at accredited colleges or universities in order to obtain a license to practice.

The exact course requirements for the IE degrees vary somewhat at the various institutions but they all fall within the guidelines set by the Missouri DESE and the profession. Different levels of the IE program also require differing coursework as do differing concentrations within technology. The Missouri DESE's Certification section should always be contacted directly for the most recent requirements.

Secure a current copy of Missouri's Technical/Industrial Education teacher certification requirements by contacting your administrator and/or the:
Missouri Department of Elementary and Secondary Education, Division of Vocational Education
Supervisor for Industrial Education

If IE certification is held in another state, the Missouri DESE should be contacted regarding reciprocity. Often at least temporary certification is qualified for. Another reason for contacting DESE is to secure the current details on Missouri Tuition Reimbursement Program. Funded by the state's concern for enhancing the quality of its education, this program reimburses teachers (pending good performance) for tuition costs of some (usually in major area certification) courses.

It is the teacher's responsibility to seek certification and re-certification when necessary. Superintendents, principals and faculty at the teacher education programs can and do assist their teachers in the process, but the responsibility ultimately rests on each individual teacher's shoulders.

Legal Requirements: Vocational Special Needs

Meeting Individual and Special Needs

All students have individual differences and special learning needs. Traditionally however, discussions related to special needs have centered on the handicapped, but students with other individual differences must also be considered. Provision must be made for: educationally disadvantaged, economically disadvantaged, limited English proficiency (LEP), gifted students and those with diverse cultural backgrounds. Additionally, students' preferred learning modes must be considered when planning instruction. Some students simply learn more, more efficiently, and more effectively when presented information in visual, auditory and kinesthetic means. Educational methods and procedures, instructional programs and materials, and school facilities must be modified for the purpose of individualizing programs and instruction to ensure that all students will develop to their fullest potential.

Federal legislation and teacher concern has provided the impetus to modify existing educational practices for learners with special needs. Such legislation is reflected in Public Law 94-142, the Education for All Handicapped Children Act of 1975, the Vocational Educational Amendments of 1976, sections 503 and 504 of the Rehabilitation Act of 1973, and more recently, the Carl D. Perkins Vocational Education Act of 1984 (P.L. 98-524) and Public Laws 99-198 and 94-198. All of these laws emphasize the need to identify and infuse educational strategies designed to provide viable educational programs for special needs students. Furthermore, the legislation requires public education to provide instructional programs which will be the least restrictive educational alternative for handicapped learners.

Identifying Special Needs Learners

Industrial education professionals typically need not be concerned with detailed identification procedures for special needs learners, because they are the responsibility of other members of the education team. However, IE professionals should become familiar with some general characteristics of learners who are identified as "special needs" in order to better plan appropriate educational learning experiences and to contribute to the identification process when needed.

It should be recognized that the term "special needs" is an inclusive term which describes students with characteristics which may impede their ability to develop their maximum potential in unmodified programs. A broad understanding of the unique learning characteristics of students who are handicapped, disadvantaged, limited English proficiency, or gifted/talented will be helpful to IE professionals in modifying programs to accommodate students with special needs. The following material lists and describes characteristics pertaining to special learning needs.

Accommodating Special Needs Students in the IE Program

Educational methods and procedures, instructional programs and materials and school facilities must be modified for the purpose of tailoring instruction to serve special needs students in IE programs. The teacher cannot accomplish this task alone. Other professionals from such areas as special education, rehabilitation, school psychology, guidance and the community in general can help. Through cooperative efforts IE programs can effectively incorporate the fundamental elements for success and therefore be as appropriate for special needs learners as they are for other students.

The teacher remains the central factor governing the special needs student's potential for success in IE. The teacher's attitude, personality and self-concept will help govern his/her performance. Teaching students from special needs populations is very much like working with non-special needs students. Each needs empathy, guidance/direction, understanding and an appropriate and challenging learning environment carefully managed by a knowledgeable teacher. There are however, some subtle, as well as obvious, characteristics of certain learners that require a change of teaching style. For example, teachers who tend to "kid" or "tease" their students may find that students with poor self-image or low self-esteem may interpret this as "ridicule," "cruel,"

and "inappropriate punishment". Likewise, special needs students want "empathy" — understanding of their limitations and the desire to help remediate them (and also build upon strengths) — rather than "sympathy." Teachers must continue to be firm but fair, consistent and yet flexible, and concerned and caring enough to challenge special needs students to achieve new goals and experiences.

To help provide such an environment, many useful items, for both instructor and student, are available from Missouri Linc and the Special Education Dissemination Center (SEDC). Although not exclusively concerned with IE resources, the center distributes and loans many items with direct value to our field. Contact them directly for their lending catalog, a description of services, their conferences and to be certain that your district is on their mailing list:

Special Education Dissemination Center
401 E. Stewart Road
University of Missouri-Columbia
Columbia, MO 65211
(314) 882-3594
(800) 397-7340

Missouri Linc
401 E. Stewart Road
University of Missouri-Columbia
Columbia, MO 65211
(314)882-2733

Legal Requirements: Equity & Civil Rights

Providing for Equity

When discussing equity it is important to remember that the term encompasses more than just sex fairness. It means being fair and impartial to people regardless of their sex, race, age and/or religion. Most materials that have been published recently have been revised to be sex fair. Additionally many references to aid the IE teacher in evaluating materials and practices on the basis of sex bias have been developed. Furthermore, most of these materials can be adapted to other equity targets if their terms related to sex fairness are replaced with others related to race, religion or age.

To insure quality programming, IE instructors should review all curriculum materials to eliminate biases. Of course, elimination of biased language will not eliminate biased conduct, but as the language is liberated from biased usage and assumptions, people will begin to share more equitably in social and economic realms.

The new thrust towards equity emphasizes action, not only in recruitment but also retention. IE instructors are therefore encouraged to assess why target group students do not return to the program if they leave. Additional assistance with equity thrusts may be obtained from:

Special Vocational Services
Vocational Adult Education
Department of Elementary & Secondary Ed.
P.O. Box 480
Jefferson City, MO 65102
(314) 751-2661

Project SERVE
10 Industrial Education
Instructional Materials Laboratory
University of Missouri-Columbia
Columbia, MO 65211
(800) 392-2717

Similarly, recruitment and program admission policies and procedures must be evaluated in order to eliminate any unnecessarily restrictive statements. Poorly phrased or overly restrictive policies could bias class participation in unintended ways. Course prerequisites, if any, must be examined in the same way to determine if they are unnecessarily restrictive or are inadvertently prejudiced.

Change is a slow process and traditions are not relinquished easily. Industrial educators must examine their own beliefs and assess their appropriateness. If they are dedicated to quality education for all students, IE teachers must remove those barriers which prohibit equity for all potential students. Some potential strategies to promote equity with existing materials are shown in the following figure.

Equity Strategies for Classroom Teachers[1]

1. Be direct with students about bias. Point out racist or sexist bias in books or materials. Help them learn to identify sources of bias and important omissions in the materials.
2. Develop classroom activities around identifying bias found in television, textbooks, movies, library books or magazines.
3. Incorporate the development of cricital reading skills as an instructional objective for all your teaching, not just when special efforts are being made to identify bias in materials.
4. Identify or develop supplementary materials which can help "correct" some of the bias of available materials.
5. Assign student papers, themes, term papers or other activities on topics or persons not usually covered in textbooks or materials.
6. Invite local resource persons into your classroom to provide additional information and work with students on special projects and activities.
7. Ask students to rewrite materials or write their own materials on subjects omitted from the textbook or write the material from another person's point of view.
8. Use bulletin boards, posters, pictures, magazines and other materials to expose students to information commonly exluded from traditional materials.
9. Develop a classroom collection of non-racist, non-sexist reading materials for students. Identify books that students may be encouraged to seek out in their personal reading.
10. Be proactive in recruitment of nontraditional students and organize informational activities designed to attract nontraditional students.
11. Create an industrial education day where students in lower grades can have hands-on experiences with technology.
12. Develop a slide-tape presentation targeted on non-traditional populations to encourage their participation in IE.

Additional Resources: Law and Responsibility

_____. Handbook for Secondary Vocational Education Program Planning. Jefferson City, MO: Missouri Department of Elementary and Secondary Education, Division of Career and Adult Education.

_____. Secondary Certification Requirements. Jefferson City, MO: Missouri Department of Elementary and Secondary Education, May 1984.

Activity Sheet 2

Summarize your findings

Worksheet: Laws and requirements important to vocational education

Use your readings, discussions and other resources to summarize the key laws and requirements important to vocational instructors. List the areas in the left-hand blocks, the exact name and citation of the law/regulation in the right-hand block, and the implications of the law/requirement in the block below the previous entries.

Teacher responsibilities	Law/Requirement:
Implications:	
Special needs students	Law/Requirement:
Implications:	
Child abuse	Law/Requirement:
Implications:	
Chemical abuse	Law/Requirement:
Implications:	
Hazardous materials	Law/Requirement:
Implications:	
Teacher evaluation	Law/Requirement:
Implications:	
Safety	Law/Requirement:
Implications:	
Equity/Civil Rights	Law/Requirement:
Implications:	
	Law/Requirement:
Implications:	
	Law/Requirement:
Implications:	

Notes

Learning Experience II

Liability Matters Related to Vocational Education

Learning Experience II Competencies/Tasks:

4. Describe the legal implications of certifying students' competence.
5. Describe the essential components of a plan to reduce a vocational educator's liability exposure.
6. Identify the most appropriate manner to secure liability insurance protection for one's personal situation.

Introduction:

Learning Experience II consists of several different activities and worksheets. Each of these is designed to help you explore the topic of liability and its minimization. The experiences include:

1. Read Activity 1, Missouri specifics pertaining to liability and vocational education.
2. Optionally you may wish to read the following supplemental material (Note the Liability Bibliography):
   - Your insurance agent's descriptions of professional pursuits liability coverage
   - Your professional association's (MSTA, MNEA, MAFT, AVA) descriptive materials for their liability coverage
   - Your school board's policies and documentation about their liability coverage
3. Complete Activity 2's worksheet to compare the insurance coverages available to you.
4. You should meet/talk with Missouri's Department of Elementary and Secondary Education's Supervisor for Health Occupational and/or Industrial Education (Trade & Technical), your insurance agent, association officer, administrator, instructor and/or peers to further discuss the information in the readings.
5. For Activity 3, prepare an analysis of the key liability issues facing you. Use the worksheet "Summary of liability issues."
6. As your final activity, #4, develop a plan to reduce your liability exposure caused by your employment in vocational education. Use the worksheet "Reducing liability exposure"

Activity Sheet 1

Secure and review relevant liability information

Missouri specifics pertaining to liability & vocational education [1]

abstracted from
Dyrenfurth, Michael J. & Linhardt, Richard E. (1981). Vocational Safety Guide
Columbia, MO: Instructional Materials Laboratory
University of Missouri-Columbia

Liability of the State

"It is a long-established principle of common law that the state is not liable in damages for injuries resulting from the negligence of its officers, agents, and employees" (7, p. 115).

Liability of School Districts

"Because school districts are agencies or arms of the state it has been held that the immunity which clothes the state also clothes school districts and their administrative bodies—boards of education" (7, p. 115).

School liability is very difficult to treat because there are certain areas where the school is immune from liability and others where liability, as determined in a court of law, is decided on the basis of opinions and circumstances (fact). Liability as a result of school officer and/or employee negligence can range from contractual or a violation of a statute to litigation resulting from negligence. Since schools operate through the medium of individuals—that is, school officers and employees—this chapter discusses liability with this in mind first. Then it treats insurance as it protects the schools and school employees, and finally Missouri's statutory requirements are summarized.

Liability of Educational Personnel

Administrators. The administrator should not assume that just because he/she was not present when a student injury occurred that he/she cannot be held liable in a tort suit which might ensue. In fact, two recent court cases illustrate that administrators may be liable for negligent supervision or failure to provide supervision.

- The Minnesota Supreme Court held a principal negligent in part for an injury sustained by a student in a physical education class. The court reasoned that the principal failed to exercise reasonable care in supervising the development, planning, and administration of the school's physical education curriculum and in supervising the inexperienced physical education instructor.

1* Readers should note that this section's contents describe the best available interpretations, inferences, decisions, and information available to the research team, and as limited by the extend of the grant. Furthermore, because of the complexity of law and because the courts, of course, are the sole interpreters of it, practical arts and vocational technical educators concerned with legal issues should always seek competent legal counsel to validate the applicability of the impressions generated by this guide to the specifics of their own situation.

The services of Mr.Paul Kinder, Supervisor, School Law section of Missouri's Department of Elementary and Secondary Education, in preparing much of the chapter from which this has been adapted, are also appreciatively acknowledged.

Larson V. Independent School District No. 314, Braham, 2890 N.W. 2d 112 (MN). 1979.

- The Missouri Court of Appeals, Southern District, stated in a recent decision that, "Supervisory public school employees and teachers are not immune from tort liability for inadequate supervision of their students but such liability is highly subjective and scope of their duties extremely narrow."[b] (Emphases added)

In light of these and other court decisions, it should be apparent that the administrator should be aware that he or she must become actively involved in the development and implementation of a safety policy for his or her building or buildings.

Instructor Liability. The instructor has the legal responsibility for accidents that involve students while they are participating in activities to which they have been assigned. Instructors may be held liable for accidents that happen as a result of their negligence and this liability may also extend to administrators. The prevention of, or protection from, liability may be best accomplished by strictly following this checklist:

1. Obtain adequate liability insurance from a professional association, the American Vocational Association, the education association in your state, or other appropriate sources.
2. Provide adequate supervision, and be in the classroom or laboratory at all times when class is in session. Never leave while any student is in the laboratory.
3. Act as a reasonable and prudent person would act under the same or similar circumstances.
4. Correct known dangerous and defective conditions or report them to the proper authority, and clearly mark them out of order or dangerous.
5. Use good sense in the selection of student activities.
6. Insist that safety glasses be worn in all areas in which there is equipment and even a remote chance of eye injury.
7. Provide proper instruction in the use of all tools, machines and equipment.
8. Implement a comprehensive safety program and rigidly enforce all rules and regulations.
9. Maintain the entire physical facility in safe working condition.
10. Provide proper protective equipment and require students to wear it and proper clothing while working in the laboratory.
11. Clearly label all toxic and flammable materials and provide proper storage for them.
12. Insist that industrial quality guards be provided and used whenever a machine is operated.
13. Set a proper example for students to follow.
14. Know your students!

bKersey v. Harbin, 591 S.W. 3d 745 (MO). 1979.

Additional Resources: Liability

Gathercoal, F. & Stern, S. (1987). Legal Issues For Industrial Educators. Ann Arbor, MI: Prakken Publications. [Ellis: KF4208 .G37 1987]

Pryor, R. O. (1984). Vocational Teacher Liability And How To Avoid It. Columbus, OH: Ohio State University, Vocational Instructional Materials Laboratory.

Purvis, J. (April, 1986). Liability in the laboratory. Science Teacher, 53(4), 38-41.

Activity Sheet 2

Comparing liability coverage & cost

Characteristic	When you've not made a mistake	When you have made a mistake
Legal service/coverage provided to you		
Legal service/coverage provided to your employer		
Extent of coverage, dollar limit to benefit		
Nature of other coverage elements		
Requirements for eligibility		
Cost of coverage and who pays		
Record/experience of company & carrier		
Endorsed /arranged by		

Activity Sheet 3

Summarizing liability issues

Consider your teaching situation and your day-to-day work. List, in the left-hand column, the key aspects of your work where you think you might be exposed to liability. Then, in the right-hand column, describe the things/actions/behavior that might make you vulnerable to liability. Some examples are provided to stimulate your thinking.

Situation:	**Liability exposure/dangers:**
Grading student performance	1. Talking about student performance in front of others for whom there is no professional reason to know. 2. Certifying competence when there is no valid basis to do so.
Special needs students	1. Refusing to accept a classified student into your class
Discipling students	1. Corporal punishment

Activity Sheet 4

Reducing liability exposure

Summarize the most important ways in which you are exposed to liability risks given your vocational education assignment by listing them in the left-hand column. Then, based on your readings and discussions, list the ways by which you could systematically reduce your liability vulnerability in the right hand column. Some samples are provided to stimulate your thinking.

Liability Exposure	Action steps to reduce vulnerability
Civil rights	1. Never administer corporal punishment 2. Treat each pupil, regardless of gender and/or race, in the same manner 3. ...
Reasonable and prudent	1. Perform a safety analysis of your curriculum 2. Have your advisory committee perform a safety analysis of your classroom/ workshop/laboratory 3. ...
Safety	1. Systematically teach each major safety competency 2. Develop and use reliable and valid safety tests 3. Periodically reassess student mastery of safety competencies 4. ...
Discipline	1. Develop, document and promulgate a clear discipline policy 2. ...
Policy enforcement	1. Follow due policy 2. ...

Notes

Learning Experience III

Providing for Safety in Vocational Education

Learning Experience III Competencies/Tasks:

7. Identify key unique legal and/or safety requirements associated with assigned subject and situation.

8. Systematically incorporate provisions for student safety in the course and/or cooperative experience.

9. Recognize and provide for the special legal and safety requirements associated with vocational student organizations.

10. Provide for legal and product liability

Introduction:

Learning Experience III involves a variety of activities. Each activity explores some aspect of the interface between safety and vocational education. The experiences include:

1. Read Activity 1's handout, Missouri Specifics: Safety Responsibilities.

2. Read the handout "Missouri Safety Program Recommendations."

3. Optionally you may wish to scan/read the most appropriate reference items in the supplemental safety bibliography provided to secure additional information on items such as the following:.

   - Accident report form
   - Safety bibliography
   - Safety suppliers

4. For Activity 2, conduct a safety analysis of your curriculum and instructional facility

   - Use the NSC facility inspection check list
   - Use the worksheet "Assessment of safety program"

5. You may also wish to meet with your district safety coordinator, administrator, instructor and/or peers to further discuss the information in the readings. Another source for interpretations and insight are the Missouri DESE, Division of Vocational and Adult Education State staff (the Director and Health Occupations and Industrial Education supervisors)

6. For Activity 3, develop an outline for a complete safety plan appropriate to your vocational education assignment, and that incorporates the recommendations as adapted to your situation.

Activity Sheet 1

Secure and review relevant safety information

MISSOURI SPECIFICS: Safety Responsibilities

Administrative Guidelines For School Safety

School personnel should note the document, Administrative Guidelines For School Safety, as prepared by the Department of Elementary and Secondary Education. This addresses general school aspects, school transportation safety planning, and it provides a sample of Board of Education recommendations for safety education and emergency preparedness.

Direct Level Responsibilities

Local Board of Education Responsibilities

1. Develop a policy statement regarding school safety .
2. Select and appoint a safety advisory committee.
3. Be aware of and consider safety and emergency disaster planning when reviewing school construction specifications.
4. Establish policies related to school personnel assignments and responsibilities in the area of vocational, technical, and practical arts safety.
5. Comply with competent legal advice concerning the status of school personnel and school property in time of normal instructional segments of the safety program, emergencies, drills and exercises.
6. Provide efficient and safe practical arts and vocational technical education facilities and equipment.
7. Provide liability insurance and legal services to employees as commensurate with law and/or agreements.
8. Fund sufficient and necessary improvements, facility maintenance projects, safety supplies and equipment purchases to produce a safe instructional environment.
9. Require that the practical arts and vocational technical education curriculum devotes sufficient time for safety instruction.
10. Evaluate performance of district and school administration and teachers regarding safety procedures, equipment and safety instruction quality.
11. Provide for the safety of students when innovations involving curriculum changes are made.
12. Incorporate a safety review as an integral part of the evolution of new and/or remodeled facilities.
13. Inform practical arts and vocational technical education instructors of any specific insurance coverage arranged through district policies.
14. Appoint a safety coordinator for the school district and adopt a job description that includes practical arts and vocational technical education safety responsibilities.
15. Provide and/or support in-service training of practical arts and vocational technical education teachers in the area of safety.
16. Regularly inform administrators and instructional staff of their legal safety obligations and of any relevant changes therein.
17. Provide for inspection and enforcement of established safety regulations.
18. Approve and/or revise the practical arts and vocational technical education safety program as advanced by faculty and administration.

Superintendent/President Responsibilities

1. Provide for the overall administration, budgeting, development, organization, personnel assignment, evaluation, and updating of the school safety program.
2. Appoint Director of Safety or assign such overall responsibility to one person.
3. Provide appropriate administrative and financial support to the practical arts and vocational technical education safety program.
4. Implement an accident reporting system to establish data for improvement of administrative, instructional, and protective measures.
5. Work towards ongoing school and community interest in safety.
6. Request sufficient and necessary improvements, facility maintenance projects, safety supplies and equipment to produce a safe instructional environment for practical arts and vocational technical education.
7. Insure that the practical arts and vocational technical education curricula devote sufficient time for safety instruction.

District Safety Coordinator Responsibilities

1. Coordinate school safety functions.
2. Establish, guide, and provide assistance to school safety committees.
3. Provide for and participate in school safety inspections.
4. Establish a communication system to keep teachers and administrators abreast of new safety standards and procedures.
5. Provide for and assist in the implementation of a comprehensive safety program.
6. Research special safety problems that may exist.
7. Obtain and disseminate safety relevant material (laws, regulations, policies, guidelines, inspection checklist, posters.
8. Analyze, report, and record all accidents.
9. Prepare annual safety report for the administration and make appropriate recommendations.
10. Act in an advisory capacity, to the administration, on all matters pertaining to accident prevention.
11. Conduct personal investigation of fatal, serious and potentially serious accidents.
12. Supervise or cooperate with subject matter supervisors and instructors in the safety training of students.
13. Maintain professional contacts outside the school environment to exchange information with others and to keep the accident prevention and safety instruction program current.
14. Insure that federal, state, or local laws, ordinances, regulations, and codes bearing on safety are complied with.
15. Initiate and continue activities that stimulate and maintain teacher and student interest in accident prevention.
16. Implement, supervise, and evaluate appropriate safety education programs, including curriculum, instruction, or staff improvement courses or seminars.
17. Provide for the maintenance of relevant student records such as health and physical examinations.
18. Develop emergency plans and procedures for the entire school district.

Director of Buildings and Grounds Responsibilities

1. Locate and chart all valves, switches, and lines of all utility services. Distribute these charts to all administrative and safety personnel and where appropriate, to practical arts and vocational technical education faculty.
2. Paint in accordance with approved color coding all water, steam, gas, and other tubular conduits and indicate with numerous arrows the normal direction of flow of fluids, both within buildings and on school grounds.
3. Perform periodic inspections to insure utility controls are operations and post charts for use by other personnel during emergencies.
4. Provide for emergency operation or control of utility services during disasters.

5. Perform periodic inspections of government and/or community disaster supplies.
6. Inspect, report to an assigned coordinator, and repair damaged equipment or facility areas, including hallways, classrooms, playground, shops.
7. Inspect and maintain protective equipment and emergency facilities including items within practical arts and vocational technical education laboratories and shops.
8. Assist in developing disaster/emergency preparedness and safety programs.

Safety Committee Responsibilities

1. Arouse and maintain the interest of school administrators, supervisors, and teachers, and help them understand that safety is everybody's business.
2. Arouse and maintain the interest of students and convince them that they play an essential role in the prevention of accidents to themselves and others by planning and effecting safety demonstrations, contests, and displays.
3. Make safety activities an integral part of the whole institution's operating policies and methods.
4. Provide an opportunity for the open discussion of accidents, safety problems and preventative measures.
5. Discuss and formulate prevention policies and recommend their adoption to school administrators.
6. Identify unsafe conditions and practices and outline appropriate solutions.
7. Develop and revise safety recommendations specific to practical arts and vocational technical education.
8. Promote first aid training for practical arts and vocational technical education faculty.
9. Review faculty developed safety programs.

BUILDING LEVEL RESPONSIBILITIES

Principal's Responsibilities

1. Implement and supervise the overall safety program at the building level.
2. Plan and disseminate safety program information to staff, students, parents, and other district personnel (with assigned duties in that building).
3. Provide for school nurse appointments.
4. Recommend and/or appoint a building safety coordinator as well as other building level safety personnel as appropriate.
5. Conduct or provide for safety inspections of school facilities including specialized practical arts and vocational technical education laboratories.
6. Provide for the enforcement of accepted practices.
7. Review curriculum for the inclusion of safety instruction.
8. Maintain contact with the local, state, and national agencies which provide safety information and services.
9. Secure support from, and maintain liaison with, system administration with respect to:
   a. the approval of the overall safety education program.
   b. securing adequate budgetary support for safety items and activities.
   c. expediting building changes necessary for safe operation.
   d. procuring safety equipment.
   e. reporting and investigating accidents.
   f. selecting instructors with specific knowledges and abilities to establish safe practices, procedures and environments.
   g. arranging for administrative measures that reduce liability of staff members.
10. Provide positive leadership for an active and continuous school safety program and foster incorporation of safety education and school safety program activities as part of the educational program, by:
    a. initiating a specific program of safety instruction.
    b. promoting school-wide attitudes toward accident prevention.
    c. establishing in-service training in accident prevention for teachers.
    d. encouraging staff to maintain first aid proficiency.

e. requiring that safety supplies and emergency procedures are current and properly organized.
f. encouraging the instructional staff to be knowledgeable and proficient in the use of fire and other emergency apparatus.

11. Implement the safety program by:
    a. checking periodically to insure the adopted safety program is in effect.
    b. observing teachers for implementation of safety instruction as an integral part of the course of study.
    c. stimulating the discovery, analysis, and prompt correction of unsafe conditions or practices.
    d. supporting teachers in enforcement of safety regulations.
    e. reviewing accident reports.
    f. establishing procedures for investigating and analyzing accidents.
12. Provide safe facilities and services by:
    a. reporting unsafe structural conditions to higher authorities.
    b. planning with teachers for the removal of unsafe structural conditions and other hazards, and for the installation of safety devices.
    c. inspecting facilities regularly for condition of equipment and safety devices, proper housekeeping, and adequacy of exits, ventilation and material handling systems.
    d. requiring that safety and applicable safety regulations are regularly reviewed.
    e. providing class sizes that are in keeping with student characteristics as well as the capacity, square footage, and number of work stations available in each facility.
    f. providing a procedure for the removal of students who repeatedly violate established safety rules and regulations and who are identified as safety hazards.
13. Secure cooperation of outside personnel and agencies by:
    a. assisting teachers in locating community personnel and services which will be helpful in the safety program.
    b. encouraging resource personnel to assist in the school's practical arts and vocational technical education safety program.
    c. regularly informing the public about the school's safety education program.

<u>School Building Safety Coordinator Responsibilities</u>

1. Coordinate the plans and educational activities for his/her school with those of other schools in the system.
2. Request, maintain, and check school safety supplies, materials, and equipment.
3. Obtain, prepare, and evaluate safety curricular materials.
4. Assist teachers in incorporating safety instructional materials in their courses of study.
5. Report periodically on the status of the school safety program.
6. Request/provide for the training of all building personnel in emergency procedures and in-service safety workshops.
7. Work with faculty to insure adequate safety inspection of school facilities.
8. Assist the Director of Safety in implementing the overall safety program.

<u>Teacher Responsibilities</u>

1. Comply with safety policies and regulations and systematically implement the approved safety program.
2. Always provide for the supervision of students in the classroom or laboratory in accordance with legal requirements. Do not leave the classroom and/or laboratory unsupervised at any time when students are present or when they might enter in your absence.
3. Motivate students to strive for safety.
4. Set a good example for the students by observing all safety rules and practices.
5. Perform in a manner which is commensurate with that of a reasonable, prudent person.
6. Establish course specific emergency procedures.
7. Enforce all safety rules and regulations.
8. Properly plan and/or arrange facility and equipment.
9. Devise and enforce safe housekeeping procedures.

10. Maintain clean and organized facilities.
11. Provide prompt and thorough reports of accidents including written reports by instructor, written accounts by witnesses, photographs of accident scenes and conditions, and the standard accident report form.
12. Require that students receive the required safety instruction prior to working in the laboratory/shop.
13. Be aware of the specific safety needs of special needs (disadvantaged and handicapped) students.
14. Actively cooperate and participate in all possible phases of the school safety program.
15. Evaluate student teachers with specific regard to providing for their classes' safety.
16. Regularly inspect laboratory facilities to provide for optimum safety conditions by giving special attention to:
    a. layout of equipment and furniture.
    b. utilities and building services.
    c. equipment guarding.
    d. storage and condition of tools.
    e. storage, labeling, handling, and condition of materials.
17. Follow fire safety requirements and procedures.
18. Follow electrical code requirements.
19. Use accepted industrial safety standards.
20. Correct and/or report unsafe conditions.
21. Recommend needed safety improvements to the school's administration.
22. Assist school administrators in selecting equipment for school use.
23. Insist that guards meeting accepted standards be provided and used whenever a machine is operated.
24. Insist that adequate eye protection be worn (during laboratory operation and in other potentially hazardous areas).
25. Provide proper protective equipment, and insist on its use, in all shop areas.
26. Require students to wear proper clothing and adequate hair protection while working in the laboratory.
27. Develop specific safe practices, rules and regulations relating to your facilities and provide for their enforcement.
28. Give instruction on potential hazards and accident prevention specific to the particular laboratory and course of study involved.
29. Incorporate safety instruction (dealing with the proper use of all tools, machines, equipment and materials) in the formal course of study.
30. Insure that all course activities are in the school's approved course of study.
31. Record each student's attendance, safety instruction received, and his/her safety evaluation results.
32. Periodically retest students to insure maintenance/retention of specific safety competencies.
33. Become aware of all types of emergency and disaster procedures, developments, and information.
34. Keep current on safety developments in field.
35. Participate in safety training programs, such as first aid, civil defense, and other relevant safety courses.
36. Request assistance from the school safety coordinator when needed.

Student Responsibilities

1. Abide by the safety rules and observe safety practices at all times.
2. Assist in evaluating and updating safety procedures.
3. Recognize personal limitations.
4. Assist in maintaining equipment in safe working order.
5. Keep work areas clean.
6. Use proper dress, guards, and protective equipment.
7. Follow instructions and indicate when they are unclear.
8. Report unsafe conditions to the instructor or supervisor.
9. Be considerate of other students in order to prevent their injury through unsafe actions.
10. Give proper attention to safety instruction.
11. Be informed and prepared to handle an accident, emergency, or disaster.
12. Develop sense of responsibility for personal safety.
13. Acknowledge safety instruction received.

Missouri Safety Program Recommendations

Adapted from
Dyrenfurth, Michael J. & Linhardt, Richard E. (1981). Vocational Safety Guide
and Dyrenfurth, Michael J. et al. (1987). Missouri Industrial Technology Education Guide
Columbia, MO: Instructional Materials Laboratory
University of Missouri-Columbia

1. Implementing A Safety Program

Introduction

Safety must be an ever present concern of all IE instructors. Given the hundreds of thousands of student who over the years have experienced IE, it is clear that this concern for safety has been attended to. However safety is something that can never be taken for granted. This section presents some guidelines and recommendations that will help IE instructors in maintaining and increasing safety of their learning experiences.

Wherever one deals with safety, the overall safety hierarchy must be kept in mind. In the business and industrial world this means that a situation is first engineered for safety; then remaining hazards are guarded against; education to prevent and avoid accidents is subsequently provided; and finally personal protective equipment is supplied to further reduce vulnerability. Administrators and instructors are well advised to emulate this private sector practice by:

- **specifying and securing only thoughtfully engineered safe machines, equipment and facilities.**
- **carefully guarding against existing hazards with systematically engineered devices.**
- **incorporating a comprehensive safety instructional program into the overall course of study.**
- **providing and requiring the use of necessary personal protective equipment, of appropriate design and quality, in sufficient quantity.**

However, any reading as short as this one can not adequately cover the complex topic of safety. For details readers are encouraged to consult additional resources. Additionally, instructors are encouraged to consult experts because safety is just too important a concern to be handled individually. The following personnel can provide additional detailed information:

- **Missouri's State Industrial Education or Health Occupations Supervisors — These persons, because of their day-to-day involvement, can provide valuable advice on many safety-related matters.**
- **Specialized Resource Personnel — These are individuals who are teaching or otherwise specifically concerned with safety. Examples include: university, junior/community college and area vocational school faculty as well as representatives from agencies such as those listed in the Missouri Vocational Safety Guide's "Useful Information" section.**
- **Industrial Consultants — Many industries already provide representatives to serve on advisory committees. These and other companies can often supply safety, facility, equipment and material advice.**

It is suggested that instructors begin work on safety with a thorough review of what they are currently doing. Professional Standards provide a most useful way of accomplishing this. They will guide a systematic review of the:

- Program
- Physical Environment
- Records

Then, for additional detail, various Safety Guides, available from the Missouri Vocational Resource Center, can answer many of the questions instructors will ask. They can also save much time because of their worked out examples.

Instruction

IE instructors must recognize their responsibilities for the safety of their students. Because students are usually minors, and because in all cases, they must be presumed to have incomplete mastery of the skill, knowledge and attitudes associated with the subject being pursued, their instructors must provide for the careful development of those competencies necessary to operate safely in the laboratory, shop, or on the training site. This means that instructors must provide safety instruction. Furthermore, this instruction must be systematic (thorough coverage), performance based (provide clear evidence of accomplishment), reinforced periodically (involve repetition to counter forgetting) and it certainly must be documented (recorded on paper for others to review).

Content and Organization. The safety instructional program employed by instructors should be based on an analysis of known safety hazards, activity requirements, standard precautions, and the like. To identify the content that must form the core of a safety program, instructors must access a large number of safety standards specific to their subject area. Careful selection is necessary to achieve student mastery of three vital objectives:

- To recognize existing and potential hazards
- To understand appropriate defense/avoidance and/or prevention strategies
- To be able to act in time

In all cases, instructors are faced with the decision as to what content to build into the safety instruction. Another important point is to identify which safety instruction should precede all other work and which will be infused throughout the day-to-day instructional activity. It is recommended that instructors approach these decisions by identifying the prerequisite knowledges, skills and attitudes that are necessary to the safe functioning of students during their early learning activities. These need to be mastered before any laboratory experience begins.

Following this, the safety knowledges, attitudes and skills that are needed for subsequent activities must be built into the regular day-to-day instruction. In this way, students are not presented with an artificial dichotomy between "work" and "safety."

The safety program's instructional content needs to be carefully documented, both for purposes of effective initial organization as well as for the record. Both protect the instructor in the event of liability claims. Because it should be readily identifiable as a freestanding component of any course, the safety program needs to be developed with its own goals and objectives, its units of instruction, and of course, its own lesson plans. Although instructors are encouraged to infuse as much safety instruction as possible into their "regular" instruction, in order to insure thorough treatment, it is recommended that they:

- **Identify the safety content (knowledges needed, desirable attitudes, required skills) necessary to operate safely in the area being taught.**
- **Write the goals and objectives for the safety program.**
- **Organize the safety content into units of instruction.**
- **Detail each unit of instruction by identifying lesson plans to be taught in each unit.**

Suggested Instructional Techniques. Safety instruction is more effective when a variety of approaches are employed and when it is tailored to the objectives being addressed. A comprehensive safety program provides for performance and attitudes in addition to knowledge. Therefore, the methods used must be selected appropriately. Furthermore, instructors are invariably faced with the task of not only teaching the necessary content once, but also of:

- Providing remedial safety instruction when students are not able to demonstrate the desired behavior after initial instruction.
- Providing back-up instruction to those students who were not in attendance during the original instruction.
- Providing reinforcement instruction to bring students back up to a level of performance previously attained but now forgotten.

A review of most available state safety guides has resulted in a list of recommended instructional methods. These include:

- Teach accident prevention with a positive approach — stressing the right way to perform an operation.
- Give demonstrations emphasizing the safe use of hazardous tools, utensils, machines, equipment and materials.
- Provide instruction on what to do in case of an accident in the laboratory.
- Give periodic demonstrations on the proper use and care of personal protective devices.
- Provide each student with the general safety rules of the laboratory.
- Use a bulletin board for safety bulletins, safety poster and safety rules and regulations. Change eye-catching features regularly.
- Periodically use discussion time to emphasize the importance of student attitude in accident prevention.
- Send letters to parents when a student has exhibited a great degree of interest in safety or when he/she has successfully applied safety practices.
- Require all beginning students to make a careful study to identify possible hazards in the laboratory during the first few days of the course.
- Prepare a written safety education program for the IE program and each course.
- Provide students with convenient ways to refresh their memory of correct and safe procedures for each assigned activity.
- Provide work station "prompts," labels and signs to alert students to appropriate procedures, guards and personal protective equipment.
- Foster student leadership through a student personnel system for accident prevention.

Evaluation

Teaching safety is a very complex and difficult task. It involves the psychomotor, cognitive and affective domains of student behavior in situations where it is sometimes difficult to measure/monitor progress. Also, because each student is an individual, evaluations should be designed to test students in a variety of ways. Regardless of design, safety evaluations must reflect the material and objectives presented in the instruction and then the results should be carefully recorded.

Obviously a wide variety of techniques can be used to test safety knowledges, attitudes and skills. However, because of legal and moral issues, it is vitally important that they be valid and reliable—otherwise instructors will find they are of no value to them or their students. Some of the more commonly used tests types are:

- Pencil and paper — a written exam which may be administered at varying intervals after instruction. This could be an examination on general safety rules or on specific safety rules for machines or equipment.
- Observation of performance — using a checklist of safety rules/procedures to note whether, or to what extent, students use specific machines and/or equipment according to the manner that was demonstrated and taught.

- Critical incident technique — An observation technique that has instructors identifying attitudes and/or practices that students should demonstrate. Instructors then specify a series of descriptions (critical incidents) that exemplify the varying degrees to which a student can demonstrate the desired behavior. Rating students then involves observations for a period of time and then recording which of the "critical incidents" were noted thereby indicating the extent to which the student has demonstrated the desired behavior. The following figure provides a sample of a critical incident rating scale.

Sample Critical Incident Technique Safety Rating Format

Safety Area Being Rated	Low Safety Concern		High Safety Concern	
Housekeeping	Leaves tools and equipment in work area, does not clean work area before or after working	Replaces tools. Begins and finishes work without cleaning up his/her work area	Cleans up area after job is completed, but is less concerned with problems outside his/her work area	Observes various safety hazards and works to correct even if outside of his/her direct work area
Personal Protective Equipment	Has to be reminded to wear safety glasses, aprons, proper shoes, etc., several times during the class.	Occasionally fails to use required protective equipment for the job being performed.	Always uses PP-equipment, usually attempts to clean equipment before or after use.	Uses protective equipment for each job performed. Performs daily maintenance on protective equipment. Cleans equipment before and after use.
Machines and Equipment	Attempts to adjust machine while it is running. Does not use proper guards and procedure.	Occasionally fails to following operating instructions for machine. Does not think through operations.	Insures guards are in place while operating equipment. Reads and follows operating instructions.	Follows safety rules and regulations. Cares for the safety of others while in his/her work area. Informs instructor of safety hazards.

Record Keeping

It is absolutely essential for instructors to keep safety-related records. One main objective for this is to call attention to accident prone areas/processes so that steps may be taken to correct an unsafe condition. Records may also be used to protect an employee (instructor) and/or the employer (administrator and board) if either is required to provide evidence of instruction or use of proper safety procedures. Additionally such records assist instructors in tracking student progress and subsequently in tailoring instruction to meet individual needs. Among the recommended record keeping procedures are:

- Require each student to sign information sheets dealing with laboratory safety rules and regulations to indicate that he/she has read and understood the regulation. A copy of the information sheets should be kept on file and students should keep the original along with relevant instructional material.
- Require students to demonstrate appropriate levels of proficiency on safety tests before using equipment. Subsequently, students should have to sign their names on each test and thereby indicate that they have received instructions and passed the safety examination.
- Retain all safety information sheets and tests in student files in instructor's office.
- Prepare a classroom chart to indicate safety instruction given, date of instruction, student attendance and safety test performance.
- Prepare and file an appropriate accident report form for each injury requiring treatment.
- Keep records of instruction given, attendance of students, student performance tests, safety evaluative tests, maintenance of equipment, memos and letters concerning safety practices (Texas Industrial Technology Curriculum Guide, p. 291).
- Notations citing date, time and circumstances should be made of chronic disruptive behavior and violations of safety procedures. These notations should be placed in each student's cumulative folder, reviewed regularly with the student and, where necessary, referred to administration for appropriate action (Texas Industrial Technology Curriculum Guide, p. 291).
- Keep records for a period of time as advised by school counsel.

Accident Reports

Accident reports are an essential part of a good safety program. They help to inform, educate and remind people of what to look for in regard to accident prevention. They also provide an important record of safety infractions and safety precautions. The following procedure is one that could be employed. (Vocational Safety Guide, 1981, p. 40)

1. Fill out the accident report form, such as the following sample, within 24 hours of the incident. This guards against details that may become vague after a few hours have passed and that may thereby affect the report's accuracy.
2. Prepare your report in duplicate. One should be hand-delivered to the principal (or supervisor) and another should be kept in your personal files.
3. Include information on the basis of how, where, what, who, when and why the accident happened in reconstructing the sequence of events.

4. The U.S. Department of Labor has recommended that the following principles should be observed in preparing reports...
   a. Use common sense — Stick to the facts, weigh their value, reach justified conclusions.
   b. Investigate each clue — Apparently reasonable conclusions will often be changed by exploring factors which initially may not appear to be important.
   c. Check for unsafe conditions and facts — Both are present in the great majority of accidents.

Student Accident Report Form[1]

This form is straight-forward yet it obtains a large amount of data to document an accident effectively. It is also a very efficient method that yields data for the summary report that should be developed at least annually. Such a summary organizes data so that corrective actions can be taken to prevent recurrence of accidents. Additional information about student accident reporting is available from the National Safety Council. They havemmade available, to all school districts that enroll 300 students or more, the Student Accident Reporting Guidebook. This guide can be obtained by writing to the National Safety Council, at 425 N. Michigan Avenue, Chicago, IL 60611.

Student Accident Report

__ School Jurisdictional
__ Non–School Jurisdictional

__ Recordable
__ Reportable Only

School District: _____

City, State: _____

1. Name: _____ 2. Address: _____
3. School: _____ 4. Sex: _____ 5. Age: _____ 6. Grade: _____
7. Time Accident Occurred: _____ Day of Week: _____ Time: a.m. p.m.
8. Nature of Injury: _____
9. Part of Body Injured: _____
10. Degree of Injury: Death: ___ Permanent: ___ Temporary: ___ Non-Disabling (no lost time:) ___
11. Days Lost: From School: _____ Activities Other Than School: _____ Total: _____
12. Cause of Injury: _____
13. Accident Jurisdiction
    ____ School ____ Grounds ____ Building ____ To and from: ____
    ____ Non-School ____ Home ____ Other: _____
    ____ Activities not on School Property
14. Location of Accident (Be specific): ____ 15. Activity of Person: _____
16. Status of Activity: _____ 17. Supervision (if yes give name & title): _____
18. Agency Involved: _____ 19. Unsafe Act: _____
20. Unsafe Mechanical/Physical Condition: __ 21. Unsafe Personal Factor: _____
22. Corrective Action Taken or Recommended: _____
23. Property Damage: School $ _____ Non-School $ _____ Total $ _____
24. Desription (give a word picture of the accident, explaining who, what, when, why and how)
25. Date of Report: _____
26. Report Prepared by (signature & title): _____ 27. Principal's Signature _____

[1]Adapted from the National Safety Council's 1966 recommendations.

d. Make recommendations - No investigation is complete unless corrective action is suggested and carried out.
e. Investigate all accidents — Chance is often the sole difference between a trivial accident and a serious one. Results cannot be predicted.

Treatment of Injuries

Typically state and school policy, as well as good practice, call for IE instructors to avoid supplying or administering medication. In fact, teachers are well-advised to avoid any treatment (other than first aid) of a wound or injury. It is also recommended that each IE instructor have taken a certified first aid course. To provide for students' safety, be sure to instruct them to report all injuries — no matter how small — to the instructor and the school nurse or other designated person responsible for health! A sample of such procedures is presented in the figure on the following page.

Inspections

A safe environment is an essential part of a safety program. A safe environment will exist only if hazards are discovered and corrected through regular and frequent inspections by school personnel-administrators, safety coordinators, insurance and fire personnel, teachers and students, state supervisors, university faculty, and service area specialists. It is recommended that professional standards be used to guide such inspections. Depending upon the type of shop/laboratory or circumstances involved in each case, safety inspections by several persons might be necessary. The IE teacher should also be making a constant safety inspection as he/she goes through daily routines — always alert to changing conditions or work methods. In most cases, teachers need to make hourly checks and inspections to be certain that all safety precautions are in place.

A safety inspection/checklist is an objective tool to help improve working and learning conditions in the laboratory. Use a detailed safety checklist, such as the one developed by the National Safety Council. Such checklists serve several purposes in that they:

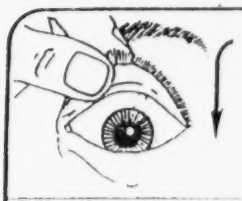
- **inform, educate and remind persons of key characteristics of safe environments.**
- **train personnel to be sensitively observant and aware of their environment.**
- **provide a source of feedback to teachers and administrators that indicates the extent to which the IE facility is a safe environment.**
- **provide a record of safety items and prevention activity.**

First Aid

For Eye Injuries Before Competent Medical Help is Obtained

NOTE: NO MATTER HOW MINOR THE INJURY, PROFESSIONAL MEDICAL TREATMENT MUST BE OBTAINED AS SOON AS POSSIBLE.

NOTE: DETERMINE IF THE VICTIM IS WEARING CONTACT LENSES—THEY MUST BE REMOVED BEFORE FIRST AID IS ADMINISTERED.



SPECKS IN THE EYE

DO lift upper eyelid outward and down over the lower lid.
DO let tears wash out speck or particle.
DO if particle doesn't wash out—keep eye closed, bandage lightly and see a doctor.
DO NOT rub the eye.
DO seek professional medical treatment as soon as possible.

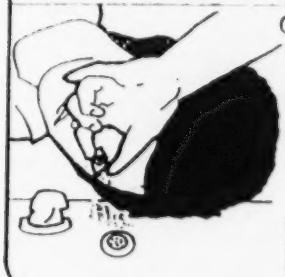
BLOWS TO THE EYE

NOTE: Discoloration (black eye) could mean internal damage to eyes.

DO apply cold compresses immediately, for 15 minutes; again each hour as needed to reduce pain and swelling.
DO seek professional medical treatment as soon as possible.

CUTS AND PUNCTURES OF THE EYE OR EYELID

DO bandage lightly.
DO NOT wash eye with water.
DO NOT try to remove an object imbedded in the eye.
DO seek professional medical treatment as soon as possible.



CHEMICAL SPLASHES

Eye damage from chemicals may be extremely serious, as from alkalis or caustic acids; or less severe, as from chemical "irritants."

In all cases of eye contact with chemicals:

DO flood the eye with water immediately, continuously and gently, for at least 15 minutes. Use eyewash fountain, hold head under faucet or pour water into the eyes using any clean container. Keep eyelids open as widely as possible.
DO NOT use an eye cup.
DO NOT bandage the eye.
DO seek professional medical treatment as soon as possible.

NOTE: Spray containers are an increasing source of chemical eye injury compounded by the force of contact. Whether containing caustic or "irritants," spray containers must be carefully used with proper instruction and supervision.

*From Eye Protection in Educational Institutions. New Jersey State Department of Education, 1980.

BEST COPY AVAILABLE

Organization and Approval of the Overall Safety Program

Several points are essential to a carefully organized and properly endorsed safety program. Most importantly, such a program will exist both on paper and in practice. In other words, a safety program will not exist merely on paper as a compliance document, **but it will occur in the day-to-day practice of the program**. A complete safety program will include a wide variety of components:

1. **A statement of the educational system's general policy for the safe operation of IE courses.**
2. **A statement of objectives for IE's overall safety program.**
3. **A content outline of the safety information to be incorporated in each course.**
4. **An outline of the methods used to provide safety education to students.**
5. **A description of the methods and instruments to be used to assess student knowledge and skills as they relate to safety.**
6. **Separate and specific statements of practices and precautions required for safe operation within each individual course.**
7. **A plan for the periodic inspections and maintenance of facilities, materials, tools, machines, equipment and personal protective devices (as appropriate) used to provide instruction.**
8. **A staged (time-lined) plan for the eliminations of all known hazards and problems.**
9. **Specifications of the emergency procedures to be followed in the event of an accident/injury involving a student, teacher or other individual for each separate IE facility.**
10. **A description of the record keeping practices to be employed in documenting safety instruction, attendance and control of class movements and of accidents/injuries that occur.**
11. **A plan for the ongoing in-service training of instructors in safety-related content, skills and procedures.**

Format. It is recommended that each system and/or program organize their safety programs in a loose-leaf format with tab dividers to reflect each major section as outlined above. Furthermore it would be advantageous to provide each instructor with copies of the general sections as well as of the sections that pertain specifically to his/her own service area (and courses). In addition, it will be important that one complete manual be available in each building.

Approval Procedures. Ultimately, the most significant safety program approval that can exist is that from the Board of Education that governs the system/institution involved. Consequently, it is recommended that each board consider itself responsible to review and formally approve a carefully developed, systematic, system-wide safety program. Because boards have a reasonable right to expect that materials presented to them are appropriate and thorough in their content, it is recommended that instructors follow the approval sequence as shown:

1. **Conduct a local instructor and supervisor workshop to orient staff to that which is needed, to assign development responsibility and to establish time lines.**

2. **Hold meetings to consolidate the specifics of the safety program and to coordinate treatment of safety items in each course.**

3. **Request input and revision from the state industrial education supervisor and from program advisory councils.**

4. **For larger systems, hold a system-wide meeting of faculty to coordinate safety programs across the board.**

5. **Prepare a brief outline of the steps used to develop the system's safety program. Then, together with a cover letter from the system's chief IE administrator, route the complete program outline and cover letter through the superintendent, to the president/chairperson of the Board of Education and request formal approval.**

Additional Resources: Safety

_____. (1966). Student Accident Reporting Guidebook. Chicago, IL: National Safety Council.

_____. (1975). Handbook Of Occupational Safety And Health. Chicago, IL: National Safety Council.

_____. (1977). OSHA Record-Keeping Forms. Chicago, IL: Commerce Clearing House.

_____. (1979). Health And Safety Resource Guide For Trades And Industry And Industrial Arts Programs In The Maryland Educational System. College Park, MD: Vocational Instructional Materials Laboratory. [MVAC ITE 21.0101 A16f]

_____. (1979). Industrial Education Safety Guide. Salt Lake City, UT: Utah State Board of Education.

_____. (1980). Index to health and safety education. Los Angeles: National Information Center for Educational Media, University of Southern California.

_____. (1980). Training Requirements In OSHA Standards. Washington, DC: Department of Labor, Occupational Safety and Health Administration.

_____. (1981). Delaware Safety Manual For Vocational Education Programs. Dover, DE: The Delaware Department of Public Information. [MVRC IE 15.0608 A17]

_____. (1982). General safety manual for vocational-technical education and industrial arts programs. Bulletin No. 1674. Baton Rouge, LA: Louisiana State Department of Education. [ED221714]

_____. (1982). Millwright Apprenticeship, Related Training Modules, 1.1-1.8 Safety. Salem, OR: Oregon State Department of Education. [ED254715]

_____. (1983). Provide for student safety. Second Edition. Module E-5 of Category E—Instructional Management. Professional Teacher Education Module Series. Columbus, OH: National Center for Research in Vocational Education. [ED228418]

_____. (1984). Safety And Science Teaching. Richmond, VA: Virginia State Dept. of Education. [ED256610]

_____. (1984). School Science Laboratories A Guide To Some Hazardous Substances. Washington, DC: U.S. Consumer Product Safety Commission.

_____. (1984). School Science Laboratories, A Guide To Some Hazardous Substances, A Supplement To The National Institute For Occupational Safety And Health Manual Of Safety And Health Hazards In The School Science. Washington, DC: Laboratory.Council of State Science Supervisors. [ED247101]

_____. (1984). Science guide for secondary schools. Atlanta, GA: Georgia State Dept. of Education. [ED253392]

_____. (1986). Understanding The Small Quantity Generator Hazardous Waste Rules: A Handbook For Small Business. Jefferson City, MO: Department of Material Resources, Waste Management Program.

_____. (1987). Safety guide for vocational, trade, industrial and technology education. Olympia, WA: Superintendent of public instruction. [VECM 007422]

_____. (1987). Science Safety Handbook For California High Schools. Sacramento, CA: California State Department of Education.

_____. (1988). Health And Safety Handbook For Education Employees. Washington, DC: Professional & Organizational Development/Research Division.

_____. (1988). Prudent Practices For Handling Hazardous Chemicals In Laboratories. Washington, DC: National Science Foundation. [ED221362]

_____. (1989). Concise Manual Of Chemical And Environmental Safety In Schools And Colleges. Philadelphia, PA: J. B. Lippincott Company.

_____. (N.D.). Best's Safety Directory: Safety-Security-Pollution Control Products. Morrison, NJ: A. M. Best Co.

_____. (N.D.). Missouri Safety. Jefferson City, MO: Missouri Office of Administration.

_____. (N.D.). Safety Education Handbook. Volumes I, II, III. Wichita, KS: Kansas State Department of Education. [MVRC ITE 21.0101 A16a Vol. I, II, III]

_____. (N.D.). Developing Shop Safety Skills. Student & instructor guide and slide/tape. Athens, GA: American Association for Vocational Instructional Materials, n.d. [VE-903-S, SW, I, AV].

_____. (N.D.). Power Tool Safety And Operation. Student and teacher manual c/w examinations and transparency masters. MN: Hobar, n.d., [VE 273 H-I, VE 173 H-S].

_____. (N.D.). Safety Color Coding For The Shop. Student guide and slide/tape. Athens, GA: American Association for Vocational Instructional Materials, n.d., [VE-904-S, AV].

_____. (N.D.). Safety Exams. Complete set of 24. MN: Hobar, n.d., [VE-625H-H].

Bronaugh, J. C. (1989, January). Safety in the chemical laboratory: safety showers and eyewash fountains. Journal of Chemical Education, 66(1), A18, A24, A26-27.

Case, C. L. (1989). Biology Laboratory Safety Manual. California [ED306104]

Dombrowski, J. M. & Hagelberg, R. R. (1985, July). The effects of a safety unit on student safety knowledge and behavior. Science Education, 69(4), 527-33.

Dyrenfurth, M. J. & Linhardt, R. (1981). Vocational Safety Guide. Columbia, MO: University of Missouri-Columbia, Instructional Materials Laboratory. [MVRC ITE 20.0101 A16g]

Ekpo, J. (1988, December). Safety tips: the design and development of chemistry laboratory safety modules for secondary schools. Journal of Chemical Education, 65(12),1088-89.

Ellse, M. D. (1989). Teaching electrical safety. School Science Review, 70(252), 21-25.

Finn, P. (1980). Teaching Occupational Safety And Health At The Secondary And College Level. Reston, VA: Association for Advancement of Health Education.

Firenze, R. J. & Walters, J. B. (1981). Safety And Health For Industrial/Vocational Education For Supervisors & Instructors. Washington, DC: U.S. Department of Health and Human Services.

Fuscaldo, A. A. (1980). Laboratory Safety: Theory And Practice. New York: Academic Press.

Gerlovich, J. A. & Miller, J. (1989, May). Safety tips: safe disposal of unwanted school chemicals—a proven plan. Journal of Chemical Education, 66(50), 433-34.

Harper, C. & Bartlett, B. (1989, December). Putting in a plug for classroom safety. Science Teacher, 56(9), 38-40.

Hart, C. (1989, July). Safety in the chemical laboratory: selecting chemical protective gloves properly in the lab. Journal of Chemical Education 66(7), A179-81.

Houk, C. & Hart, C. (1987, October). Safety in the chemical laboratory: hazards in a photography lab. Journal of Chemical Education, 64(10), A234, A236.

Kirk, A. S. (Ed.) (1988). Safety & Health. Resource Guide For Occupational/Technology Education. Augusta, ME: Maine State Department of Educational and Cultural Services. [ED304573]

Koren, H. (1980). Handbook of Environmental Health And Safety: Principles And Practices. New York: Pergamon Press.

Lang, P. (1986, October). Safety tips: disposal, labeling, and storage in a high school chemistry laboratory. Journal of Chemical Education, 63(10), 887-88.

Lemons, J. L. (1990). Missouri Secondary Science Safety Manual. Columbia, MO: Missouri Education Center.

Mallow, A. (1978). Laser Safety Handbook. New York, NY: Van Nostrand Reinhold.

Marsick, D. J. & Thornton, S. F. (1988, May). Safety tips: science teacher safety survey. Journal of Chemical Education, 65(5), 448-49.

Martin, W. F. (1987). Hazardous Waste Handbook For Health And Safety. Boston, MA: Butterworths.
Orton, R. J. (1985, March). Safety VI: hazards in physics laboratories. School Science Review, 66(236), 447-54.

Pal, S. B. (1985). Handbook of Laboratory Health And Safety Measures. Boston, MA: MTP Press.

Pease, E. S. (1985). Occupational Safety And Health: A Sourcebook. New York, NY: Garland Pub.

Pitt, M.J. (1985). Handbook of Laboratory Waste Disposal. New York: Halsted Press.

Reynolds, R. (1986). Safety is your department. Science Teacher, 53(6), 42-48.

Ronan, W. (N.D.). Shop and home safety: personal safety. Transparency-duplicating book with teachers guide. St. Louis, MO: Milliken Publishing.

Rothchild, R. (1988, December). Efficient and cost-effective use of adjustable canopy hoods in a chemistry laboratory. Journal of Chemical Education, 65(12), 1113.

Sliney, D. (1980). Safety With Lasers And Other Optical Sources: A Comprehensive Handbook. New York, NY: Plenum Press.

Stricoff, R.S. (1990). Laboratory Health And Safety Handbook: A Guide For The Preparation Of A Chemical Hygiene Plan. New York, NY: Wiley.

Strong, M. E. (Ed.). (1975). Accident Prevention Manual For Training Programs. Illinois: American Technical Society. ISBN:0-8269-4517-1.

Swami, P. (1986, Winter). Science laboratory safety: findings and implications for teacher education. Science Education in Ohio, 4(1), 48-57.

Teresinski, M. F. (1983). Industrial Respiratory Protection. Ann Arbor, MI: Ann Arbor Science.

Walters, D. B. (1988, August). Safety in the chemical laboratory: the selection of eyewash stations for laboratory use. Journal of Chemical Education, 65(8), A199-A203.

Young, D. J. (N.D.). How To Comply With The OSHA Hazard Communication Standard: A Complete Guide To Compliance With OSHA Worker Right-To-Know Regulations. Fayetteville, NC: Environmental Resource Center.

Activity Sheet 2

Assess your safety program

Safety and Health

The goals of industrial education will require that laboratories be designed to accommodate tools, equipment, materials and unique instructional strategies that represent today and the future. Safety and health must remain a high priority as laboratories are designed and re-designed to accommodate change to reflect new technologies. The statements contained within this standard topic concern safety and health. A comprehensive safety and health program is essential to the success of a quality industrial education program. The program provides for a safe environment and promotes lifelong attitudes and practices regarding safety and health.

Fill in marks to indicate assessment: — not met, 0 met, D exceeded

1.	Teachers prepare a written plan for comprehensive safety and health program.	— 0 D
2.	Administrative personnel provide input for and approval of the safety and health program.	— 0 D
3.	Community, resources, including the industrial education advisory committee, provide input to the safety and health program.	— 0 D
4.	Local, state, and national safety and health literature and regulations are utilized in planning the safety and health program.	— 0 D
5.	Safety and health information is included in instruction for all laboratory activities.	— 0 D
6.	Teacher and student activities reinforce safety and health instruction.	— 0 D
7.	Safety and health instruction is adapted to individual student needs.	— 0 D
8.	Safety and health practices are monitored continuously and reviewed annually by the teacher.	— 0 D
9.	Local administrators assess and make recommendations for the improvement of the safety and health program.	— 0 D
10.	Proper authorities, external to the school, inspect periodically and report on the safety and health program.	— 0 D
11.	Students demonstrate acceptable knowledge, skills, and attitudes of safety and health practices and rules through written and performance tests, and in-class behavior.	— 0 D
12.	Teachers and administrators review each recorded accident and all unsafe practices to correct deficiencies.	— 0 D
13.	Classroom and laboratory facilities meet safety and health laws and regulations.	— 0 D
14.	Safety zones and aisles are properly marked.	— 0 D
15.	Lavatory facilities for both sexes are provided near or in the industrial education laboratory	— 0 D
16.	Lighting is appropriate for the activities performed within the facility.	— 0 D
17.	Proper exhaust system equipment which removes fumes, chips, and dust from the building is provided, as needed.	— 0 D
18.	Noise levels within the laboratory do not exceed acceptable limits.	— 0 D
19.	Proper equipment is provided to heat, cool, or ventilate all instructional and ancillary areas, as needed.	— 0 D
20.	Approved safe cabinets, containers, or rooms are provided to store flammable and corrosive materials.	— 0 D
21.	Special safety and health accommodations are provided for students with special needs, as required.	— 0 D
22.	Floors and all other surfaces are kept free of waste material, grease, and obstructions, as needed.	— 0 D
23.	Floors have non-skid surfaces, with special application on machine-operator work areas.	— 0 D
24.	Each laboratory with powered equipment has the equivalent of one easily accessible emergency disconnect switch (panic button) per perimeter wall.	— 0 D

25.	Fire extinguishers of the correct class are provided in appropriate locations.	— 0 D
26.	A first-aid kit and related emergency supplies are provided in accordance with local regulations.	— 0 D
27.	Equipment which satisfies state and federal regulations is selected on the basis of the ability to meet program objectives safely.	— 0 D
28.	Machines and tools are placed, mounted, if necessary, and arranged in a safe and functional manner.	— 0 D
29.	All machines and power tools are provided with approved commercial guards and safety devices.	— 0 D
30.	Safety guards remain in place, except when the machine is disconnected for cleaning, repair, or adjustment.	— 0 D
31.	Any machine or tool found to be unsafe is removed from service and marked accordingly.	— 0 D
32.	Color-coding schemes for safety purposes are used throughout the industrial education laboratory.	— 0 D
33.	Conveniently located magnetic control switches and/or control boxes and braking devices are provided for appropriate machines.	— 0 D
34.	Lockable master switch boxes are located in each industrial education laboratory.	— 0 D
35.	State or federally approved eye protection devices are required of all persons exposed to conditions which may cause eye injury.	— 0 D
36.	State or federally approved ear protection devices are required of all persons exposed to conditions which may cause ear damage.	— 0 D
37.	State or federally approved respiratory protection devices are required of all persons exposed to conditions which may cause respiratory problems.	— 0 D
38.	State or federally approved head protection devices are required of all persons exposed to conditions which may cause head injury.	— 0 D
39.	Specially adapted personal protection devices are available for and used by students with special needs, as needed.	— 0 D
40.	Teachers and students wear appropriate clothing when exposed to conditions which warrant such protection.	— 0 D
41.	Personal protection devices requiring sanitation are sanitized after each use.	— 0 D
42.	Corrective and preventive maintenance is performed within a reasonable time following written notification to the appropriate administrator.	— 0 D
43.	Lesson plans documenting provision for safety and health instruction are on file.	— 0 D
	Health knowledge, attitudes, and skills are on file.	
45.	Inspection, maintenance, repair, and replacement records are current and on file, as required.	— 0 D
46.	Records of each accident and the follow-up procedures taken are on file.	— 0 D
47.	Emergency procedures for responding to accidents are posted and on file.	— 0 D

Number of the topic's standards that were not met (—), met (0), and exceeded (D): ———

Activity Sheet 3

Develop your safety program

Now the challenge is to assemble a complete safety program containing the elements highlighted in these materials and more. Examples of the latter might include locally, site specific requirements and your own district's policies.

It is suggested that you compile these very systematically in a three ring binder to enable easy access and updating. When you have assembled a draft, go over it with a fellow teacher and/or your principal. Then, revise as appropriate and have the document formally approved by your school board.

Notes

Summary and Review: Learning Experiences 1, 2 & 3

The objectives for this module were to develop initial awareness of, and an increased sensitivity to, the complex of knowledge, skills and attitudes central to legal responsibilities, liability protection and overall safety.

The heart of this module is the teacher's or teacher candidate's thoughtful interaction with the referenced materials and their supplementation with additional materials appropriate to local and specific needs. This interaction is best accomplished by (check off to confirm):

1. Completing each of this module's activities

   Learning experience I: Legal matters related to vocational education

   - Secure and review basic legal information
   - Summarize your findings

   Learning experience 2: Liability Matters Related to Vocational Education

   - Secure and review relevant liability information
   - Compare liability coverage and costs
   - Summarize liability issues
   - Reduce liability exposure

   Learning experience 3: Providing for Safety in Vocational Education

   - Secure and review relevant safety information
   - Assess your safety program
   - Develop safety program

2. By discussing legal, liability and safety requirements with:

   your administrator

   your peers

3. By developing an overall safety program and compiling it into a readily accessible binder.

4. By securing formal school board approval of the safety program.

Adapted from Guidelines for the Creative Use of Biased Materials in a Non-Biased Way.

Readers should note that this section's contents describe the best available interpretations, inferences, decisions, and information available to the research team, and as limited by the extent of the grant. Furthermore, because of the complexity of law and because the courts, of course, are the sole interpreters of it, practical arts and vocational technical educators concerned with legal issues should always seek competent legal counsel to validate the applicability of the impressions generated by this guide to the specifics of their own situation.

Notes

The services of Mr. Paul Kinder, Supervisor, School Law section of Missouri's Department of Elementary and Secondary Education, in preparing much of the chapter from which this has been adapted, are also appreciatively acknowledged.

Larson v. Independent School District No. 314, Braham, 289 N.W. 2d 112 (MN). 1979.

Kersey v. Harbin, 591 S.W. 3d 745 (MO). 1979.

Adapted from the National Safety Council's 1966 recommendations.